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ABSTRACT

The HPI Texas Preschool Screening Inventory (TPSI) is a test to help determine which children might be a risk for learning problems as they enter kindergarten or first grade. The HPI Manual describes the procedure, score interpretation, and rationale for seven components of the test, including auditory memory for numbers and letters, visual memory for objects; auditory sequencing (syntax); articulation; sound discrimination; rotation and reversals of letters and numbers; and following instructions. The instrument is not meant as a definitive test of a child's abilities; failure of the screening test is shown to indicate a need for further evaluation of the child. The worksheet presents a complete text of the procedure for each test component. For example, the auditory memory test requires that the child listen to and repeat a series of 3-, 4- and 5-digit numbers. Auditory sequencing requires that the child repeat sentences heard. The score sheet interprets performance on each component for children less than-4, 4, 5, and 6 years old. (CM)

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HPI (TPSI) MANUAL

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Introduction

The HPI is a screening test to help determine which youngsters might be a risk for learning problems as they enter Kindergarten or first grade. This instrument is not meant as a definitive test of a child's abilities and should not be interpreted as such to parents.

> "The concept of screening and evaluation are separate issues. Screening is a process whereby the child's performance is judged against a set standard or expectation for chronologic age or other factor. FAILURE OF A SCREENING EXAM ONLY INDICATES A NEED FOR EVALUATION, IT DOES NOT IDENTIFY THE CHILD AS BEING HANDICAPPED. HOWEVER, THE CHILD WHO FAILS A SCREENING EXAM SHOULD BE IDENTIFIED TO THE EDUCATIONAL AGENCY (LOCAL PUBLIC SCHOOLS) AS A CHILD IN NEED OF A FULL EVALUATION."
>
> Page 22-23, Task Force on Public Law 94-142, American Academy of Pediatrics, April, 1981.

Components

1. Auditory memory for numbers and letters

Procedure: Say "listen...now say what I say when I stop talking.

342	7281	21576
698	2164	53102
175	6598	72685

Score: A four year old should be able to repeat 2 or 3 of a sequency of 3. A four year old should be able to repeat at least one of the three sequences of a series of four. A five to six year old two or three of a sequence of 4. A child over six should be able to repeat a sequence of five numbers on at least two of the three sequences.

Rationale: The ability to listen actively is an important part of communication. To gain competence in listening skills and to be able to reproduce verbal symbols, the child must be able to reproduce verbal symbols. The child must be able to attend to auditory stimuli and to remember them long enough to imitate them. When memory span is delayed in maturing, speech development and various aspects of academic development may be delayed.

Gesell (1940), Zimmerman, Terman and Merrill (1937), McCarthy (1972)

2. Visual memory for objects

Procedure: Present four, five and then six objects in sequence in front of the

child. (Any series of small toys may be utilized). Permit the child to observe the sequence for fifteen seconds then scramble and instruct the child: Line them up exactly in the same way that you saw them. When first beginning, instruct, "I shall place some toys in front of you in a certain order. I shall let you look at them for awhile and then scramble them. I want you to replace them exactly in the same order that you saw them."

Toys and order:

(1) Block, key, coin, pencil
(2) Key, car, coin, pencil, block
(3) Ring, coin, key, pencil, car, block

Score: A four year old should be able to at least do the sequence of four. A five to six year old should be able to at least reproduce the sequence of five. A child over six should be able to reproduce all the above.

Rationale: The child must be able to attend to visual stimuli and to rememeber them long enough to imitate them. When visual memory is delayed in maturing, various aspects of academic development may be delayed.

Reference: Gesell (1940), Zimmerman, Terman and Merrill (1937), McCarthy (1972)

3. Auditory sequencing (syntax)

Procedure: The child is instructed to repeat each sentence individually, Say, "Repeat these sentences exactly as I say them:"

Listen! I like to eat red apples.
Listen! Tommy went to the store to get food for his cat.
Listen! Mrs. Jones asked John to bring home some bread and butter.

Score: A 4 year old should get the first sentence correct. A one or two word misplacement in the second sentence is acceptable for a 5 year old. A 6 year old should get all three sentences correct.

NOTE: If a child's intelligibility of the words is poor or if you are unable to understand him/her do the word imitation articulation portion of the Test. Otherwise delete it.

Rationale: Sentence imitation is one way of assessing linguistic competency of children. It has been found to help differentiate among other things the language disordered and normal children, the learning disabled and academically achieving.

Reference: Wiig and Semel (1980), Menyuk & Looney (1972), Told, Newcombe (1967), Rosenthal (1970), Wiig and Roach (1975).

4. Articulation:

Procedure: The child is told to repeat the following words. If a child is shy or unresponsive you may show him/her the appropriate picture.

k	kite	j	jar	ch	church
g	goat	th	thumb	sh	shoes
r	rabbit	s	socks		
T	Teaf	z	zoo		

Score: Norms for sounds are listed below

Table 1

Age at which selected consonants are usually produced correctly by children

Age (in years)	Consonants
3	p, m, n, ng, f, h, w
3.5	h
4	d, g, k, r
5	t, s, sh, ch, l, v
6	th (unvoiced), z
7	th (voiced), s & r blends (sm, gr, and so forth)

Rationale: Comparing sound production with the age chart can determine articulation errors at a given age. Articulation errors occur 3 times more frequently in children with reading disabilities.

Reference: Helmick (1977), Lowe (1973)

5. Sound discrimination

Procedure: The child is presented with a series of similar sounding words and asked to differentiate those which sound the same and those which do not sound the same. (Make sure child understands the concept of same). In order to do so the examiner should state - If I say girl-girl, these are the same words and sound the same. If I say share-chair, these are not the same words. We share toys with another child, but a chair is something we sit in and even through they rhyme they are not the same word and do not sound the same.

share	-	chair	same	not the same
church	-	church	same	not the same
weed	-	need	same	not the same
sell	-	shell	same	not the same
nose	-	toes	same	not the same
too	-	two	same	not the same
sick	-	thick	same	not the same
son	-	son	same	not the same
mouse	-	mouth	same	not the same
pat	-	pat	same	not the same

Score: One or two misses is normal at age 4. One miss out of the entire series is considered normal at age 5 & 6.

Rationale: The rate at which auditory language can be processed decreases when inaccurate discrimination has to be compensated for by cognitive-semantic processing and conceptualization. Accurate discrimination normally assist linguistic and semantic processing of language and facilitates analysis and synthesis at various levels. Since conceptualization may be limited in some learning disabled children, it seems prudent to evaluate discrimination as part of the evaluation of the potentially learning or language disabled child.

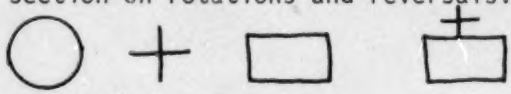
Reference: Wiig and Semal (1975), Told, Johnson and Mykleburst (1964-1967).

6. Rotations and reversals of letters and numbers

Procedure: The child is instructed...Please print the following words in lower case (little) not capital letters when I say the words...boy, girl, moon, no, good, bad, pop. Please write the following numbers 16, 85, 92, 37, 45. If a child cannot spell he/she is asked to similarly print b, g, m, n, o, d, p. If they do not understand dual numbers the numbers one through ten may be presented separately. This section of the HPI should only be used after a child has completed Kindergarten or is partially through the first grade.

Score: Children in Kindergarten can normally rotate and reverse these words. By the end of Kindergarten two reversals are acceptable. By the middle of first grade there should be none and this could be considered to possibly indicate some problems if other portions of the test indicate potential deficits.

The following visual task is utilized for children who have not finished kindergarten and is to be scored as part of the part of the section on rotations and reversals.



Scoring: A four year old should be able to copy one of four. A five year old should be able to copy two of four. A six year old should be able to copy three of four.

Circle: Pass any enclosed form resembling a circle. Fail continuous round motions.

Plus: Pass any crossing lines.

Square: Must be a closed figure having at least three angles that are near 90 degrees.

Rationale: The necessity of seeing symbols in their proper perspective and form in order for the child to make academic progress is obvious. Not doing so can interfere with his abilities to achieve in reading, writing, spelling, and math. Children with problems with visual

perception frequently have these problems. "Minor differences along non-salient perceptual dimensions, such as the orientation of a letter or the relative positions of two letters in a sequence may yield completely different meanings." (b, d,; on, no)

Reference: Kinsbourne Caplan (1979)

7. Following instructions

Procedure: (1) The child is told: give the block to me and then sit down (or stand up)

(2) Walk to the door, touch your nose and then sit down.

Prepositions: (1) Hand child a second block and tell him to put it on the table and then under the table.

Score: A 4 year old should be able to follow a two stage instruction (1). A five and six year old should be able to follow a 3 stage instruction (2). A four year old should understand prepositions under and on top of.

Rationale: In order to learn a child must first be able to understand the directions given him/her by a teacher. Without this skill incomplete and incorrect learning can frequently occur.

NOTE: Any of the subtest should be stopped when a child reaches his/her age equivalent.

Scoring: While individual examiners may wish to exercise their own judgement when a child scores below age on one subtest, it is recommended that scoring below age level on two or more subtests is highly suspicious for language and learning problems. Such children should be referred to their local school for further testing.

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TPSI Screening Test

Bibliography

Language Disabilities in Children, Wiig and Semel, Charles E. Merrill Publishing Company, Columbus, Ohio (1976).

Language Assessment and Intervention for the Learning Disabled, Wiig and Semel, Charles E. Merrill Publishing Company, Columbus, Ohio (1980).

A Pediatric Approach to Learning Disorders, Levine, Brooks and Shoakoft, John Wiley and Sons, Inc., New York (1980).

Children's Learning and Attention Problems, Kinsborn and Kaplan, Little Brown Company, Boston, Massachusetts (1979).

Zimmerman Preschool Language Scale, Zimmerman, Charles E. Merrill Publishing Company, Columbus, Ohio (1979).

Test of Language Development, Empiric Press, Austin, Texas (1977).

Terman and Merrill Sandford-Binet Scales, Haughton and Mifflin Publishing Company, Boston, Massachusetts (1973).

Gesell Development, Schedeales, New York Psychological Company (1956).

McCarthy Scales of Child Abilities, New York Psychological Corporation (1972).

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HPI (TPSI) Worksheet

*1. Auditory memory

Procedure: Say listen... now say or say what I say.

342	7281	21576
698	2164	53102
175	6598	72685

2. Visual memory for objects

Procedure: Present four, five, and then six objects in sequence in front of the child. Permit the child to observe for fifteen seconds, then scramble and instruct the child...line up the toys exactly the same way you saw them. In the beginning instruct: I shall place some toys in front of you in a certain way. I shall let you look at them for a while and then scramble them. Line up the toys exactly the same way you saw them.

a. block, key, coin, pencil
b. key, car, coin, pencil, block
c. ring, coin, key, pencil, car, block

*3. Auditory sequencing

Procedure: The child is instructed to repeat each sentence individually. Say, "Repeat each sentence exactly as I say it."

a. Listen! I like to eat red apples.

b. Listen! Tommy went to the store to get some food for his cat.

c. Listen! Mrs. Jones asked John to bring home some bread and butter.

If the words in the above sentences are pronounced poorly do the articulation test next.

4. Articulation

Procedure: Do only if the words on the auditory sequencing section are pronounced poorly. The child is told to repeat the following words. If a child is shy or unresponsive you may show him/her the appropriate picture.

K-Kite	J-Jar	CH-CHurch
G-Goat	TH-THumb	SH-SHoes
R-Rabbit	S-Socks	
L-Leaf	Z-Zoo	

*Examiner--see back of booklet for further instructions.

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*5. Sound discrimination

Procedure: The child is presented with a series of similar sounding words and asked to differentiate those that sound the same and those that do not sound the same.

Share-Chair -- same or not the same
Weed-Read -- same or not the same
Sell-Shell -- same or not the same
Two-Two -- same or not the same
Sick-Thick -- same or not the same
Son-Son -- same or not the same
Mouse-Mouth -- same or not the same
Pat-Fat -- same or not the same

*6. Rotations and reversals of letters and numbers

Procedure: The child is instructed...Please print the following words in lower case (little) not capital letters when I say the words...

boy, girl, moon, no, good, saw, bad, pop

Please write the following numbers...

16, 85, 92, 37, 45

If a child cannot spell he/she is asked to print...

b, g, m, n, o, d, p

If they do not understand dual numbers the numbers one through 10 may be presented separately. This section of the HPI should only be used after a child has completed Kindergarten or is partially through first grade.

7. Following instructions

Procedure: 1. The child is told: give the block to me and then sit down (or stand up).

2. Walk to the door, touch your nose and then sit down.

3. Hand child a second block and tell him/her to put it on the table and then under the table. (Prepositions)

Note: Any subtest should be stopped when a child reaches his/her age equivalent.

*Examiner see back of booklet for further instructions.

AGE:

SCORESHEET

Less than Four	Four	Five	Six
Auditory memory for numbers	Series of 3 (2 of 3) Series of 4 (1 of 3)	Series of 4 (two of three)	Series of 5 (two of three)
Visual memory objects	Sequence of 4	Sequence of 5	Sequence of 5 and 6
Auditory sequencing syntax	First sentence: (1 or 2 word displacement)	First sentence: Correct Second sentence: (1 or 2 word displacement)	All three sentences correct
Articulation	p, b, m, n, i, h, w, d, g, k, r	t, s, sh, ch, l, v	th, z
Sound discrimination	one or two misses	one miss	one miss
Rotation and Reversals	Normal	Two reversals (at the end of Kindergarten)	No reversals (middle of first grade)
Following instructions	2 stage	3 stage	3 stage
Prepositions (#7.3.)	should be able to do	should be able to do	should be able to do

Note: Circle the highest level of achievement in each category.

Further Instructions for the Examiner

1. Auditory Memory...Examiner says..Listen say what I say when I stop talking

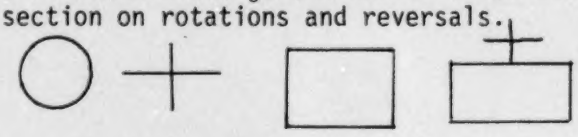
2. Sound Discrimination...If I say girl-girl these are the same words and sound the same.

   If I say share-chair, these are not the same words. We share toys but a chair is something we sit in and even though they rhyme they are not the same word.

3. Auditory sequencing...A one or two word displacement in the second sentence is acceptable.

4. If a child scores below age on articulation further evaluation with a DASE or other similar screening instrument is recommended. This subsection should not be used in scoring for high risk if it is the only subtest failed.

5. The following visual task has been added for children who have not finished Kindergarten and is to be scored as part of the section on rotations and reversals.



Scoring: A four year old should be able to copy one of four. A five year old should be able to copy two of four. A six year old should be able to copy three of four.

Circle: Pass any enclosed form resembling a circle. Fail continuous round motions.

Plus: Pass any crossing lines.

Square: Must be a closed figure having at least three angles that are near 90 degrees.